Abstract

This paper deals with the subjective theories of a teacher and his degree of inclination to biophiled concept of education. In a broader sense, it is focused on the teacher's understanding and thinking about man and his place in the world. The paper defines the theoretical framework, presents research from which we draw and describes the research methodology focused on the mentioned issue. Also, we present the criteria of biophiled orientation of education. The conclusion is devoted to the research results which showed to the teacher’s biophiled orientation.

Keywords: Biophiled orientation of education, teacher, subjective theory, research;

1. Introduction

This paper is based on the author's dissertation thesis. Its issue is an investigation† of the teacher’s degree of inclination towards biophiled concept of education, which is characterized by understanding the conflict between nature and culture, meaning between natural and artificial, and adopting biophiled values - respect for nature. Through subjective theories the degree of the teacher’s inclination to the relationship between man and nature or culture will be investigated. Subjective theories are cognitive structures which allow you to know yourself; they are implicit and include arguments by which the teacher justifies his actions and behavior. The aim of the work lies in understanding how the teacher thinks about his relationship to nature and culture, what affects him and how his subjective theories are reflected in educational practice.

Our view is that the teacher has a set of ideas, beliefs and arguments, which justify his educational activities. The argumentation alone is an important aspect of the subjective theories of teacher. Regarding the requirements of biophiled oriented education, in our opinion, it is also important that the teacher's behavior and action was not contrary to his words. The teacher's conception of relationship between nature and culture in educational context

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is an important component of professional training, which can affect biophiled orientation of education, thus our intention to strengthen the teacher's pedagogical and ecological thinking.

2. Theoretical framework

In the literature we can find various terms related to a teacher’s concept of education. Let us mention for example, teacher’s pedagogical knowledge and thinking (Bacík, 1990), teacher’s individual concept of teaching (Gavora, 1990), teacher’s concept of education (Mareš et al, 1996), teacher’s educational philosophy (Vorlíček, 2000), etc. These terms are generally confined to the teacher’s conception of educational objectives, curriculum or pupil. However, none of these terms of a teacher’s educational concept deals with the argumentative structure of the concept of education in detail. Therefore, we selected the term “subjective theory of teacher” to describe the teacher's arguments to the issue of biophiled orientation and also to include a justification why a teacher thinks or proceeds in his teaching the way he does.

The term “subjective theories” has spread in the German-speaking countries from around the eighties last century thanks to local conferences. Schlee and Wahl (1987, p. 5-7) state that the interest in the topic of the subjective theory was motivated by a cognitive turn in psychology. At the same time they point out and explain the difference between terms subjective and objective theories. Objective scientific theories do not usually arise under pressure but they are the result of a systematic and methodologically controlled scientific work for which we expect a higher degree of coherence and systematization. Language formulations are precise and also satisfy the criteria of generalization and verifiability. Argument structure of an objective theory is given explicitly. Against the objective theory stands the subjective theory. The latter often arises spontaneously, under pressure, without conscious control, its argument structure is implicit, there are more liberal assessment criteria, etc. (Janík, 2005, p. 478).

To be able to operationalize the subjective theory, we must determine the subject and the object. In our case, the subject is the teacher and the object is the biophiled orientation of education.

Biophiled orientation of education is related to promoting the idea of living in harmony with nature, respecting and protecting life, which can also be described as one of the visions of the 21st century (Horká, 2012b). We start from the evolutionary ontology of Šmajs (2008, p. 50-55) who sees the new educational concept of understanding the ontological conflict in the conflict between artificial and natural, and in solution and prevention. Šmajs suggests the need for education towards a biophiled direction; because this is the only way we can bring up a generation that will be responsible not only for the present but also for future. We are talking about a generation that is not only focused on performance and material wellbeing but also understands the interrelationship and dependence of all living and non-living components. Therefore, according to him (Šmajs, 2008, p. 58) we would instill an evolutionary way of thinking to children from an early age and strengthen it by education.

Also Marboe deals with the theme of biophiled oriented education (in Šmajs, 2011, p. 70). She states that the main goal of education is to learn to think, to look for. Searching is a prerequisite for finding your way towards comprehensive, not only superficial knowledge. Commercial knowledge prepares children for the working process, the entertainment industry or finding information of all kinds but abandons all the efforts on understanding everything in context and with reflection skills.

Horká (2012b) also deals with characteristic features of biophiled orientation of education. She summarized the features as: (a) understanding the value of nature for life and clarifying its value regardless of the man; (b) transmission of information in context, with relations and links, which have applications in daily life; (c) education of environmentally responsible people, aware of the consequences of their actions and behaviour; (d) understanding the natural evolution of the Earth, the artificial evolution of culture, and finally (e) biophiled orientation of education leads to understanding man's responsibility for expanding the culture, and for his work (cf. Horká, 2012b). We absolutely agree with these statements, therefore they were used as criteria in our
research. Also we focused on the relationship between man and nature, with culture as a main starting point of biophiled orientation of education.

3. Methodology of research

This work is based on the research of Janík (2005) and Porubský (2007) who were interested in the subjective theory of teachers in educational context and who, in their research, also used a method of interview and a technique of structuring concepts. There are other related researches such as those of Bubeliniová (2003) and Horká (2012a) who in their studies deal with environmental education. In our research we focused on the relationship between man and nature, with culture as main starting point of biophiled orientation of education.

The aim of this work is to describe how the teacher thematizes his subjective theories in the relationship of man-nature-culture from the pedagogical (didactic) point of view, while we try to answer the priority research question how the teacher thematizes subjective theory in the man-nature-culture. By other research question we try to determine how the teacher’s subjective theories are reflected in his teaching practice.

For the examination of the subjective theory of teachers we chose a method of semi-structured interview and a technique of structuring concepts (SLT), which was created in the 90s last century by researcher B. Scheele and his team of workers in Germany (in Janík, 2005, p. 485). As the first in the research we used the method of semi-structured interview, which was the starting point to the formation of concepts. The questions in the interview were focused on the biophiled orientation of education. Meanwhile we tried to regulate a statement of a respondent in this direction. Everything was recorded on a dictaphone and transcribed in the log. Then, on the basis of criteria (Horká 2012b, see above) derived from characteristics of biophiled orientation of education (what we expect from a man or a teacher in his thinking and reasoning about nature and culture), we chose the concepts from her statement (sentence or phrase). We wrote concepts on a card which we presented to the teacher again. He lined them up and stuck them to the paper according to his perceptions and also commented and at the same time argued upon why he lined up the cards the way he did and not otherwise. Everything was recorded on a dictaphone again and written to the cards. Just the network of statements related by formal relations is a basic feature of SLT. Finally, we tried to draw a subjective theory of teacher.

The research itself included one teacher from elementary school, Mrs. Jana V., who has been working in educational practice for two years. Mrs. Jana V. graduated from Education for Primary School and in this study she attended a compulsory subject Practicum of Environmental Education. Now she teaches the 2nd grade. We met twice within two weeks. Each session lasted for about an hour and a half. Due to the small sample, the results cannot be generalized.

4. Findings

In this section we will briefly present the selected concepts that we sorted into groups according to the criteria of biophiled orientation of education. Here is their verbatim transcript including argumentative structure.

A. Value of the nature

- The correct way for a change would be a mental or value change.
- Nature is beautiful.
B. The way of people’s life

- Today everything is based on the accumulation of materials and goods that we don’t need.
- Today people are very materialistic.
- If there is less money, then the consumption will decrease.
- If there is a balance, friendliness, economy, sustainable development, then our planet will work for the new generation.
- Man is a consumer who plunders nature.

C. Nature versus culture

- Technique is needed.
- We should encourage our children to use the technique with caution.
- Nature is the essence of things, everything comes out of it.
- Nature is the starting point to a cultural character because only our relationship to the nature forms a culture of man.
- All things are products of nature.

D. Context

- If children confront their opinions with their classmates, the structure of relationships, connections and correspondences is created.

E. How do I perceive

- The main value for me, that I want to transmit to children at the same time, is a respect. Respect for life, people, society, nature and culture.

F. Pedagogical context

- If the teacher goes with children to the countryside, so it is natural for them to preserve the nature and not destroy it.
- We must give to pupils many initiatives to build a relationship with nature.
- When children know why they do it, what is the purpose and what are the options, so it seems to me as the easiest way.

From the above statements we can conclude that the degree of inclination to biophiled orientation of education is high. A drawing of the teacher’s subjective theory showed that it is a complex of ideas, beliefs, and clear inclinations to biophiled orientation. Selected concepts essentially correspond to the starting points of biophiled orientation as Horká (2012b) summarized (see above). Her formulation was spontaneous and was created under the pressure of the researcher. It turned out that the teacher sometimes chooses compromise than either of the extremes - for example, “The technique is necessary”. Furthermore, it became clear that she thinks and teaches in context, which is expressed by the relation “if – then”. Most of her statements have been concerned to her pedagogical meetings, so this part was not easy to clearly separate.

5. Conclusion

Although the results indicate a biophiled orientation of teacher, we see the weakness of this research in its unchecked validation. Specifically, we mean explanatory validation - whether what the teacher says applies. However, the research helped to verify the research tool and the overall design of the dissertation thesis. Further work is to extend the research sample and add an observation. By observing we want to find out whether or how the subjective theories are reflected in a practice teaching. At the same time, we believe that it will be interesting to compare the individual subjective theory of more teachers (for example, two teachers, who are significantly
different in a degree of inclination to biophile orientation of education). Subsequently, we will try to implement the key results of the work into teaching process of future teachers at our faculty.

References